

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/17994

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B01J19/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BE 481 212 A (MAX FOUQUEMBERG) 15 April 1948 (1948-04-15) page 2, paragraph 3 page 4, paragraph 3; figure 6 ---	1-17
X	US 2 172 714 A (SCHACK ET AL) 12 September 1939 (1939-09-12) column 1, line 1 - line 18 column 1, line 34 - line 37; figures 2,2A ---	1-17
Y	US 5 304 423 A (LEX JR HENRY G ET AL) 19 April 1994 (1994-04-19) cited in the application abstract column 1, line 31 - line 56 column 2, line 9 - line 48 column 3, line 4 - line 15 column 4, line 12 - line 33; figures 3,4 ---	1-17
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

25 August 2003

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02/09/2003

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A	GB 255 770 A (OTTO STRACK;PFAELZISCHE CHAMOTTE UND THONW) 29 July 1926 (1926-07-29) column 1, line 12 - line 33 column 1, line 43 -column 2, line 69; figure 2 ----	1-17
A	GB 374 707 A (GEORGE HARRINGTON) 16 June 1932 (1932-06-16) page 1, line 1 - line 27 page 2, line 1 - line 5; figure 6 ----	1-17
A	DE 335 471 C (WUNDERLICH & CO G) 4 April 1921 (1921-04-04) column 1, line 1 - line 27 column 2, line 39 - line 41 column 2, line 42 -column 3, line 10; figures 1-3 -----	1-17

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